Deep Learning - Lab sheet 2

**IT20657864-A.D.S.Dodanthenna**

01)

No of iterations-100

A black rectangular object with orange and black lines

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No of iterations-500

A black rectangular object with white dots

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No of iterations-800

A black screen with a black border

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No of iterations-1000

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No of iterations-2500

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If we increase the number of iterations the output, getting closed to desired output and the error getting decreased.

02)

a. What happens when the number of hidden nodes increase?

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02)

b) Can you explain the pattern of the accuracy when the hidden nodes increase?

When the no of hidden nodes is very low the accuracy is also becoming very low. But if we increase the hidden nodes the accuracy became high. If we increase the hidden nodes up to 100 the accuracy became nearly 95%. Finally, it became like constant.

03 a)

Epochs=3

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Epochs=5

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Epochs=8

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Epochs=12

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Epochs=25

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A screenshot of a computer program

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02)

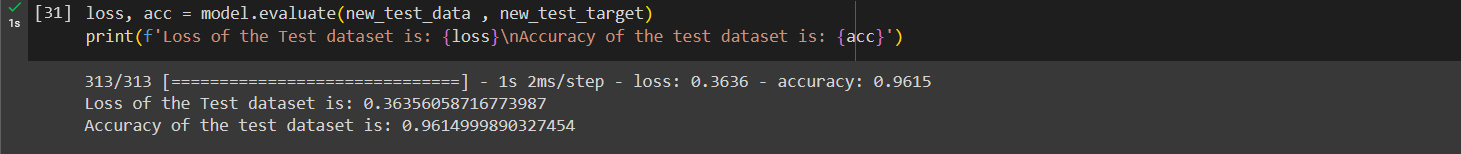
b) Add L1 and L2 regularization terms to the model and retrain the model.

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03

c) Visualize class-wise test dataset performance using a confusion matrix.

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A screenshot of a graph

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